

CHN110 FV37-18 Mass-loaded Voigt  
 Designer: Dr Scott Lindgren  
 Measurements: S.I. metric and Imperial

- Mass-loaded Voigt horn enclosure
- 18mm [3/4in] build material. Quality plywood recommended
- Vent 75mm [2in] diameter x 88mm [3.5in] long on front baffle
- Damping applied back and side walls to 152mm [6in] below driver. 15mm - 20mm [3/4in] wool felt or similar [blue on drawing] recommended. Avoid acoustic foam.
- Chamfer (round off) inside edge of driver cut-out

#### Design notes:

Mass-loaded Voigt horn provides relatively flat alignment to 41Hz. Voltage-source / high damping factor amplifier assumed.

Alignment incorporates 0.25 - 0.5 ohm series resistance for wire, connections &c.

Driver and vent may be positioned on the vertical or sloping baffle.

Fb = 41Hz

F3 = 37Hz (nominal anechoic)

F6 = 32Hz (nominal anechoic)

